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**FLEXURE DESIGN AND ASSEMBLY PROCESS  
FOR ATTACHMENT OF SLIDER USING SOLDER AND LASER REFLOW**

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**ABSTRACT**

A slider/suspension design and assembly method include securing a slider to a suspension assembly for use in a magnetic disk drive data recording device. To this end, solder bumps are applied to a metalized backside surface of the slider, and are patterned and flown within a plurality of receptacles to form a rigid mechanical connection between the slider to the flexure, while also enabling the slider-suspension assembly to be separated without damage during the process. The slider/suspension assembly is initiated by forming a plurality of slider bars on a wafer, in such a manner that the trailing edge surfaces of the sliders form a front side of the wafer. A plurality of thin film read/write elements and a plurality of electrical contact pads are formed on the wafer front side. Slider bars are then diced from the wafer, and the slider backsides are metalized on the slider bars. A pattern of solder bumps is applied onto the metalized backsides of the slider bars, and the slider bars are then sliced to form individual sliders that are secured to corresponding flexures.